

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Federal-State Joint Board on)
Universal Service)
)
Forward-Looking Mechanism)
for High Cost Support for)
Non-Rural LECs)

CC Docket No. 96-45

CC Docket No. 97-160

RECEIVED

OCT 27 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**JOINT REPLY COMMENTS OF BELL SOUTH CORPORATION,
BELL SOUTH TELECOMMUNICATIONS, INC., U S WEST, INC., AND
SPRINT LOCAL TELEPHONE COMPANIES
TO FURTHER NOTICE OF PROPOSED RULEMAKING
SECTIONS III.C.5, 7, 8 & III.D PLATFORM
III.B.3 & III.C ALL INPUTS AND IV AND V**

BELL SOUTH CORPORATION
BELL SOUTH
TELECOMMUNICATIONS, INC.

M. Robert Sutherland
Richard M. Sbaratta
Rebecca M. Lough
Suite 1700
1155 Peachtree Street, N. E.
Atlanta, GA 30309-3610
(404) 249-3390

Their Attorneys

U S. WEST, INC.

Robert B. McKenna
John L. Traylor
Suite 700
1020 19th Street, N. W.
Washington, DC 20036
(303) 672-2798

Of Counsel,
Dan L. Poole

SPRINT LOCAL
TELEPHONE COMPANIES

Jay C. Keithley
Sandra K. Williams
1850 M Street
Suite 1110
Washington, D. C. 20036
(202) 828-7453

October 27, 1997

Attorneys for Sprint Local
Telephone Companies

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Federal-State Joint Board on)	CC Docket No. 96-45
Universal Service)	
)	
Forward-Looking Mechanism)	
for High Cost Support for)	CC Docket No. 97-160
Non-Rural LECs)	

**JOINT REPLY COMMENTS OF BELL SOUTH CORPORATION,
BELL SOUTH TELECOMMUNICATIONS, INC., U S WEST, INC., AND
SPRINT LOCAL TELEPHONE COMPANIES
TO FURTHER NOTICE OF PROPOSED RULEMAKING
SECTIONS III.C.5, 7, 8 & III.D PLATFORM, III.B.3
& III.C ALL INPUTS AND IV AND V**

BellSouth, US West and the Sprint Local Telephone Companies (hereinafter "Joint Sponsors") respectfully submit their replies to the Comments filed on October 17, 1997 in the above-referenced matter.

In this Reply the BCPM sponsors address the misleading allegations conveyed by AT&T Corp. (AT&T) and MCI Corporation (MCI) in their October 17th Further Notice of Proposed Rulemaking (FNPRM) comments regarding various input values and the remaining aspects of platform design.

Given the status of the Hatfield 5.0 model, it is ironic that AT&T and MCI contend that, "[t]he BCPM sponsors have made claims about future versions of this model, but many details are

vague and the model is not yet delivered.”¹ They further state that, “the parties in this proceeding have been forced to comment on the February 1997 version of the BCPM [BCPM 1.1] presently available or draw tentative conclusions based on sponsor descriptions of the next version that may bear little similarity to the existing one.”²

The BCPM sponsors have provided substantial documentation and numerous detailed presentations at the weekly FCC workshops during this FNPRM process. In so doing, the BCPM sponsors have emphasized the most significant changes to BCPM 1.1, namely the changes in the customer location and outside plant modules.³ This documentation, including comprehensive BCPM 2.0 Model Methodology, a User’s Manual, presentation materials, and the BCPM sponsors’ FNPRM comments, can be obtained from the BCPM web site at www.BCPM2.com. In addition, the BCPM 2.0 model logic has been available on the BCPM web site since October 13th. Psuedocode, i.e. a verbal description of what the code does, is also available for the customer location and the loop modules on the BCPM web site. The BCPM 2.0 model can be downloaded from the web site. The BCPM 2.0 model results for Colorado, Kentucky, North Carolina, and New Jersey have been available on the BCPM web site since October 15th. These results were presented at the October 15th FCC workshop. The BCPM web site also contains

¹ “Comments of AT&T Corp. and MCI Telecommunications Corporation on Designated Input And Platform Issues,” filed by AT&T and MCI, In the Matter of: Federal-State Joint Board on Universal Service, CC Docket No. 96-45, and Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, October 17, 1997, p. 2.

² Ibid., p. 2.

³ The customer location and loop modules used in BCPM 2.0 are essentially the same modules that will be incorporated into BCPM 3.0. These modules generate approximately 75% of the costs associated with providing universal service.

beta versions for the transport and signaling modules that will be incorporated into BCPM 3.0. These beta versions have been available since mid August.

In summary, the BCPM sponsors have maintained a steadfast commitment to providing information to the FCC and other interested parties during this FNPRM process. Indeed, the BCPM sponsors are eager to describe the enhanced BCPM in detail because of the Model's merits.

In stark contrast to the detailed information provided by the BCPM sponsors, AT&T and MCI have provided obscure and inconsistent information about their forthcoming Hatfield 5.0 model, a model they claim will not be released until approximately November 14th. At the October 15th FCC workshop, the BCPM sponsors asked the Hatfield sponsors to clarify the following statement made by Robert A. Mercer, one of the Hatfield model developers, regarding Hatfield 5.0:

"I must caution you that the new customer location approach in the Hatfield Model has evolved considerably since the time I presented these slides. For instance, geo-coded data are now available for a higher fraction of customers than I reported in these slides. Also, **the new approach no longer considers superclusters**. I would recommend that you track the progress and outputs of the ongoing FCC Universal Service workshops to obtain the most up-to-date information on the model."⁴

When questioned about Robert Mercer's statement regarding abandoning superclusters in the Hatfield Model, AT&T responded that "superclusters" is a "term of art". AT&T's clustering algorithm remains amorphous at best. Furthermore, the Hatfield developers have not explained how customers placed along the perimeter of the Census Blocks are connected to the network.

⁴ Letter provided by Robert A. Mercer to Participants in the IIR Workshop on Applicability of Cost Proxy Models, October 14, 1997, emphasis added.

During one of the FCC workshops and in their FNPRM comments on customer location, AT&T indicated that they will use "strand mapping" in one of their versions of Hatfield 5.0.⁵ Strand mapping has never been definitively defined, and at present it is unclear if this too, is a "term of art".

AT&T also indicated at the October 15th workshop that they are now using the Business Location Research (BLR) wire center boundaries that are used in BCPM 2.0. This is inconsistent with previous comments filed by AT&T and MCI in this FNPRM proceeding in which they state that, "they are currently implementing a new assignment algorithm that will further reduce any error by utilizing a methodology that assigns an individual customer (not a CB or CBG) to a wire center based on the customer's actual telephone number when available—not an arbitrary grid system." ⁶

Moreover, AT&T and MCI have not made the code for Hatfield 5.0 available to the BCPM sponsors despite repeated inquiries regarding the code at the FCC workshops. Given discussion between the FCC staff and AT&T at the October 15th workshop, it appears that the Hatfield sponsors have provided the FCC nothing more than unintelligible excerpts of the Hatfield code.

⁵ "Comments of AT&T Corp. and MCI Telecommunications Corporation on Customer Location Issues," filed In the Matter of: Federal-State Joint Board on Universal Service, CC Docket No. 96-45, and Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, September 2, 1997.

⁶ "Comments of AT&T Corp. and MCI Telecommunications Corporation on Customer Location Issues," filed In the Matter of: Federal-State Joint Board on Universal Service, CC Docket No. 96-45, and Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, September 2, 1997, pp. 11-12.

Furthermore, in response to the FNPRM regarding model inputs, AT&T provided the "Hatfield Model Release 4.0 Inputs Portfolio", not a Hatfield Release 5.0 Inputs Portfolio.⁷ No information has been provided to determine how inputs differ in Hatfield 5.0 from Hatfield 4.0. In response to an inquiry at the October 15th workshop, AT&T indicated that there are additional inputs in Hatfield 5.0. However, AT&T did not elaborate on what those inputs are during either the workshop or their October 17th FNPRM comments.

While the BCPM sponsors and developers agree with AT&T and MCI about many of the disadvantages of creating a hybrid model that blends aspects of the enhanced BCPM and Hatfield 5.0, we strongly disagree with AT&T's and MCI's contention that Hatfield 5.0 is the superior platform. Without a clear and concise explanation of Hatfield 5.0's customer location and outside plant modules, this contention by AT&T and MCI is unsubstantiated. The BCPM sponsors maintain that the enhanced BCPM provides a superior platform based on its merits as described in publicly available presentations, documentation, and the model code.

In their comments, WorldCom suggests that the Commission adopt geo-coding of customer locations for the chosen proxy model. They readily admit that such customer-specific data does not exist for many rural customers, and that omitting these customers from the data bases would result in customers in rural areas not receiving the support they need to support affordable rural service. They then cavalierly suggest that this should not be of much concern since non-rural carriers receive no explicit support today.⁸ WorldCom's conclusions are blatantly wrong for several reasons.

⁷ "Hatfield Model Release 4.0 Inputs Portfolio," Hatfield Associates, Inc., August 1, 1997.

⁸ WorldCom at 2 - 3.

First, as a purely technical matter, many "non-rural" carriers do receive explicit support from the present Universal Service Fund (USF) for serving customers in high cost areas. Among the BCPM sponsors, for the year 1996, US West received \$2 million, Sprint received approximately \$48 million and BellSouth received approximately \$44 million.

Second, and more importantly, many "non-rural" carriers serve substantial numbers of rural customers. For example, U S WEST serves over three million customers who will require explicit support to have service remain affordable, and in its 14 state service territory serves over two-thirds of the rural customers who will need explicit support for affordable service.⁹ The reason why U S WEST has not received more explicit support in the past than it has is because the high cost rural customers are subsidized by the low cost urban customers. As local markets are opened, and carriers can selectively enter markets, the ability of urban markets to subsidize these rural customers is severely reduced. Congress correctly recognized this reality and called for the creation of "specific, predictable and sufficient" explicit support mechanisms.¹⁰

The BCPM uses the most accurate and complete publicly available data to correctly locate each and every customer geographically to his/her Census Block (CB).¹¹ This, coupled with information on the location of all roads, and the adoption of a "grid" architecture to design efficient serving arrangements, allows for the determination of the forward-looking costs for serving all customers, including all rural customers.

⁹ The remaining one-third of rural customers are served by "rural telephone companies".

¹⁰ See 47 U. S. C. § 254(b)(5).

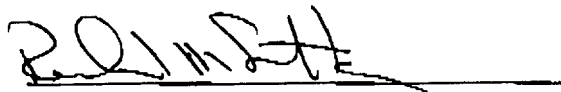
¹¹ The public nature of the CB location data stands in contrast to the proprietary nature of the mailing-list data utilized by the Hatfield sponsors.

In addition to their comments on geo-coding, WorldCom offers several suggestions for the design of outside plant. For example, they suggest that the DLC design architecture be modified from the standard 12,000 foot architecture to an 18,000 foot architecture, using extended range line cards when loops exceed 900 ohms.¹² While WorldCom correctly states that these cards cost twice what the standard line card would cost, they do not address how this extra line card expense would relate to other changes in outside plant costs. Given the long history of the engineering and development of outside plant design, it would seem that if this were the more efficient design architecture that it would have been adopted as the engineering standard.

Respectfully submitted,

BELLSOUTH CORPORATION
BELLSOUTH TELECOMMUNICATIONS, INC.

By:



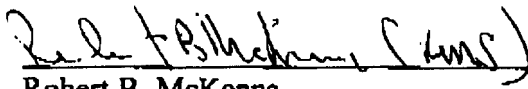
M. Robert Sutherland
Richard M. Sbaratta
Rebecca M. Lough

Suite 1700
1155 Peachtree Street, N. E.
Atlanta, GA 30309-3610
(404) 249-3386

Their Attorneys

¹² WorldCom at p. 4.

U S WEST, INC.

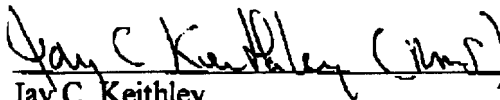
By:  (ms)
Robert B. McKenna
John L. Traylor

Suite 700
1020 19th Street, N.W.
Washington, DC 20036
(303) 672-2798

Its Attorneys

Of Counsel,
Dan L. Poole

SPRINT LOCAL TELEPHONE COMPANIES

By:  (ms)
Jay C. Keithley
Sandra K. Williams

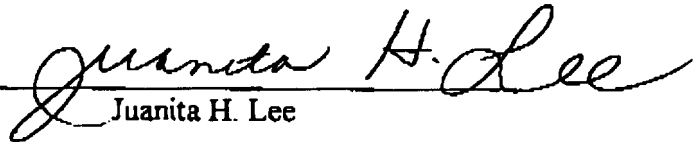
1850 M Street
Suite 1110
Washington, DC 20036
(202) 828-7453

Attorneys for Sprint Local Telephone
Companies

Date: October 27, 1997

CERTIFICATE OF SERVICE

I hereby certify that I have this 27th day of October, 1997 served all parties to this action with a copy of the foregoing **JOINT REPLY COMMENTS OF BELLSOUTH CORPORATION, BELLSOUTH TELECOMMUNICATIONS, INC., U S WEST, INC., AND SPRINT LOCAL TELEPHONE COMPANIES TO FURTHER NOTICE OF PROPOSED RULEMAKING SECTIONS III.C.5, 7, 8 & III.D PLATFORM III.B.3 & III.C ALL INPUTS AND IV AND V** by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties listed on the attached service list.



Juanita H. Lee

SERVICE LIST CC DOCKET NOS. 96-45 AND 97-160

***Reed E. Hundt**
Chairman
Federal Communications Commission
1919 M Street, NW
Room 814
Washington, DC 20554

***Susan P. Ness**
Commissioner
Federal Communications Commission
1919 M Street, NW
Room 832
Washington, DC 20554

***Regina Keeney**
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, NW
Room 500
Washington, DC 20554

***Joel Ader**
BellCore
2101 L Street, NW, 6th Floor
Washington, DC 20037

***Kathleen Franco**
Federal Communications Commission
1919 M Street, N.W.
Room 844
Washington, DC 20554

***James H. Quello**
Commissioner
Federal Communications Commission
1919 M Street, NW
Room 802
Washington, DC 20554

***Rachelle B. Chong**
Commissioner
Federal Communications Commission
1919 M Street, NW
Room 844
Washington, DC 20554

***Wilbur Thomas**
ITS
1919 M Street, NW
Room 246
Washington, DC 20554

*Emily Hoffnar
Federal Communications Commission
1919 M Street, NW
Room 844
Washington, DC 20554

*Tom Boasberg
Federal Communications Commission
1919 M Street, NW
Room 814
Washington, DC 20554

*James Casserly
Federal Communications Commission
1919 M Street, NW
Room 832
Washington, DC 20554

*Timothy Peterson
Federal Communications Commission
2100 M Street, NW
Room 8613
Washington, DC 20554

H. Russell Frisby, Jr. Chairman
Maryland Public Service Commission
16th Floor, 6 Paul Street
Baltimore, MD 21202-6806

Martha S. Hogerty
Public Counsel for the State of Missouri
Harry S. Truman Building
Room 250
POB 7800
Jefferson City, MO 65102

Bridget Duff
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0866

*Paul Gallant
Federal Communications Commission
1919 M Street NW
Room 802
Washington, DC 20554

*Chuck Keller
Federal Communications Commission
1919 M Street, NW
Room 500
Washington, DC 20554

Thor Nelson
Colorado Office of Consumer Counsel
Suite 610
1580 Logan Street
Denver, CO 80203

Charles Bolle
South Dakota PUC
500 East Capital Avenue
Pierre, SD 57501-5070

Lorraine Kenyon
Alaska Public Utilities Commission
10156 West Sixth Avenue
Suite 400
Anchorage, AK 99501

Tiane Sommer
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, Georgia 30334-5701

*Sandra Makeeff
Iowa Utilities Board
Lucas State Office Building
Des Moines, IA 50319

Deonne Bruming
Nebraska Public Service Commission
300 The Atrium 1200 N Street
POB 94927
Lincoln, NE 68509-4927

Brian Roberts
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Debra M. Kriete
Pennsylvania Public Utilities Commission
P. O. Box 3265
Harrisburg, PA 17105-3265

The Honorable Julia Johnson
Commissioner
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Philip F. McClelland
Pennsylvania Office of Consumer Affairs
1425 Strawberry Square
Harrisburg, PA 17120

James Bradford Ramsay
National Association of
Regulatory Utility Commission
1201 Constitution Avenue, NW
Washington, DC 20423

Rowland Curry
Texas Public Utility Commission
1701 North Congress Avenue
P. O. Box 13326
Austin, TX 78701

Barry Payne
Indiana Office of the Consumer Counsel
100 North Senate Avenue
Room N501
Indianapolis, IN 46204-2208

David N. Baker
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, GA 30334-5701

Carl Henderson
American Library Association Washington
1301 Pennsylvania Avenue, NW
Suite 403
Washington, DC 20004-1701

Michael S. Pabian
Ameritech
Room 4H82
2000 West Ameritech Center Drive
Hoffman Estates, IL 60196-1025

David L. Lawson
Scott M. Bohannon
AT&T Corporation
1722 I Street, NW
Washington, DC 20006

Kevin Schwenzfeir
NY State Department of Public Service
3 Empire State Plaza
Albany, NY 12223

Joseph Di Bella
Bell Atlantic Telephone Companies
1320 North Court House Road
8th Floor
Arlington, VA 22201

David Porter
WorldCom, Inc.
1120 Connecticut Avenue, NW
Suite 400
Washington, DC 20036

James S. Blaszak
Ad Hoc Telecommunications Users Committee
Levine, Blaszak, Block & Boothby, LLP
1300 Connecticut Avenue, NW
Suite 500
Washington, DC 20036

Mark C. Rosenblum
Peter H. Jacoby
AT&T Corporation
295 North Maple Avenue
Room 3245H1
Basking Ridge, NJ 07920

Mary J. Sisak
MCI Telecommunications Corp.
1801 Pennsylvania Avenue, NW
Washington, DC 20006

Margot Smiley Humphrey
Koteen & Naftalin, LLP
1150 Connecticut Avenue, NW
Suite 1000
Washington, DC 20036

Gail Polivy
GTE Service Corporation
1850 M Street, NW
Suite 1200
Washington, DC 20036

R. Michael Senkowski
Gregory J. Vogt
Suzanne Yelen
Wiley Rein & Fielding
1776 K Street, NW
Washington, DC 20006

Robert A. Mazer
Aliant Communications Company
Vinson & Elkins, LLP
1455 Pennsylvania Avenue, NW
Washington, DC 20004-1008

Joe D. Edge
Tina Pidgeon
Pureto Rico Telephone Company
Drinker Biddle & Reath, LLP
901 15th Street, NW
Suite 900
Washington, DC 20005

Richard McKenna
GTE Telephone Operations
600 Hidden Ridge
Irving, TX 75038

Laska Schoenfelder
South Dakota PUC
500 East Capital Avenue
Pierre, SD 57501-5070

Cynthia B. Miller
Senior Attorney
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Kathleen Q. Abernathy
David A. Gross
AirTouch Communications
1818 N Street, Suite 800
Washington, D.C. 20036

Charles D. Cosson
AirTouch Communications
One California Street, 29th Floor
San Francisco, CA 94111

David L. Lawson
Scott M. Bohannon
1722 I Street, N. W.
Washington, D.C. 20006

Chris Frentrup
Senior Economist
1801 Pennsylvania Avenue, N. W.
Washington, D. C. 20006

Michael F. Altschul
Randall S. Coleman
Cellular Telecommunications Industry Association
1250 Connecticut Avenue, N. W.
Suite 200
Washington, D.C. 20036

Emily C. Hewitt
George N. Barclay
Michael J. Ettner
General Services Administration
1800 F Street, N. W., Room 4002
Washington, D. C. 20405

Gail L. Polivy
GTE Service Corporation
1850 M Street, N. W.
Suite 1200
Washington, D. C. 20036

Jeffery S. Linder
Gregory J. Vogt
Suzanne Yelen
Wiley, Rein & Fielding
1776 K Street, N. W.
Washington, D. C. 20006

Peter Arth, Jr.
Lionel B. Wilson
Mary Mack Adu
People for the State of California and for
the Public Utilities Commission of the State
of California
505 Van Ness Avenue
San Francisco, CA 94102

Joe D. Edge
Richard J. Arsenault
Puerto Rico Telephone Company
Drinker Biddle & Reath LLP
901 Fifteenth Street
Suite 900
Washington, D. C. 20005

Jonathan Chambers
Sprint Spectrum L.P. (d/b/a Sprint PCS)
1801 K Street, N. W. Suite M112
Washington, D.C. 20006

Russell M. Blau
Eliot Greenwald
Swidler & Berlin, Chartered
3000 K Street, N. W.
Suite 300
Washington, D. C. 20007

*** VIA HAND DELIVERY**